NCBI **Blast 2 Sequences results**
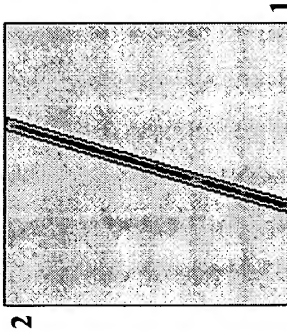
PubMed   Entrez   BLAST   OMIM   Taxonomy   Structure

BLAST 2 SEQUENCES RESULTS VERSION BLASTN 2.2.10 [Oct-19-2004]

Match: 1   Mismatch: -2   gap open: 5   gap extension: 2
x_dropoff: 50   expect: 10.000   wordsize: 11   Filter ☑   Align

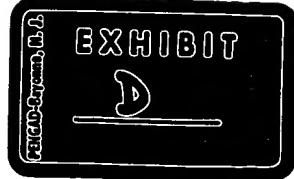**Sequence 1** lcl|seq_1 **Length** 8509 (1 .. 8509)
Sequence 2 lcl|seq_2 **Length** 2517 (1 .. 2517)

NOTE:The statistics (bitscore and expect value) is calculated based on the size of nr database

NOTE:If protein translation is reversed, please repeat the search with reverse strand of the query sequence

```
Score = 4813 bits (2503), Expect = 0.0
Identities = 2510/2517 (99%)
Strand = Plus / Plus
```

```
Query: 2955  ggcaatgggtcgaaattcatagaatttgtgtgaggtgcgtagcggctctgacaggggtg  3014
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 1     ggcaatgggtcgaaattcatagaatttgtgtgaggtgcgtagcggctctgacaggggtg  60

Query: 3015  ctgcgcggagatctctggtctcaggtaggcgacaatgagagaggtgttagttgccccctg  3074
```

Blast Result

```
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct:   61     ctgcgcggagatctctgtctcagtggcgacaatggagaggtgttagttgccccctg   120


Query: 3075     tatcgctctctgcgtggcgcattgggtcatcctgcccggacatgatattccgctagag   3134
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  121     tatcgctctctgcgtggcgcattgggtcatcctgcccggacatgatattccgctagag   180


Query: 3135     gattactgatagtttctgcctgtcgggcttgtcgggcttgtcgggcttgtc   3194
                |||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  181     gattactgatagtttctgcctgtcgggcttgtcgggcttgtcgggcttgtc   240


Query: 3195     gggcctgtccctcttgtcccgcctgtcctcacttttcacaatcaaaaatgggcgaagc   3254
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  241     gggcctgtccctcttgtcccgcctgtcctcacttttcacaatcaaaaatgggcgaagc   300


Query: 3255     ccttcttgttcttatagttcttatagttcatacgaaaattacacataattatcaatagctt   3314
                |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  301     ccttcttgttcttatagttcttatagttcatacgaaaattacacataattatcaatagctt   360


Query: 3315     attcgcttaaaagggagtaattggccgcaaaagggagt   3374
                ||||||||||||||||||||||||||||||||||||||
Sbjct:  361     attcgcttaaaagggagtaattggccgcaaaagggagt   420


Query: 3375     aattgggccgcaaaagggagtaattggccgatatcggttgtttacatggggaggaatcc   3434
                |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  421     aattgggccgcaaaagggagtaattggccgatatcggttgtttacatggggaggaatcc   480


Query: 3435     ccttaatcatttctccccatgggaaagacaacacaagtggccgcagaccggccttcgac   3494
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  481     ccttaatcatttctccccatgggaaagacaacacaagtggccgcagaccggccttcgac   540


Query: 3495     cagacaaaactgtgctccctgccgagtggcgagagggtctatatgcgcaatccgccc   3554
                |||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  541     cagacaaaactgtgctccctgccgagtggcgagagggtctatatgcgcaatccgccc   600
```

Blast Result

```
Query: 3555  cgcctgcaggcggctcaagctcatgcatttaatgatagccactgggcggccgcatggct  3614
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 601   cgcctgcaggcggctcaagctcatgcatttaatgatagccactgggcggccgcatggct  660

Query: 3615  gatgatgtgcgccatgaaatgcggctggccgcacattcgcgcacggcatgaaaaac  3674
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 661   gatgatgtgcgccatgaaatgcggctggccgcacattcgcgcacggcatgaaaaac  720

Query: 3675  catgaccgtgagagcctgaccccgctgttcgaggagctagccgctgcggtgttgacccat  3734
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 721   catgaccgtgagagcctgaccccgctgttcgaggagctagccgctgcggtgttgacccat  780

Query: 3735  gatgaccctgcaaagatgatcgtgacagtcggcggcttggtcgatgaggcgcgaatagac  3794
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 781   gatgaccctgcaaagatgatcgtgacagtcggcggcttggtcgatgaggcgcgaatagac  840

Query: 3795  taccgccaggaggcaagcggcgaactcctagtgacgtggaccttccggagtacattccgt  3854
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 841   taccgccaggaggcaagcggcgaactcctagtgacgtggaccttccggagtacattccgt  900

Query: 3855  cgtatggcggcggagtcgaaccactgggccattctcgaccgtcaaacggtattccatctc  3914
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 901   cgtatggcggcggagtcgaaccactgggccattctcgaccgtcaaacggtattccatctc  960

Query: 3915  ggtagtaagtattccgtgctgtgttccagcacgtctctagtctcgcgccaatcttgatcgg  3974
             |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 961   ggtagtaagtattccgtgctgtgttccagcacgtctctagtctcgcgccaatcttgatcgg  1020

Query: 3975  atgagcgcgaaaacctttacggtccccgagttgcggggcgctccttggagtgcccgaggga  4034
             |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 1021  atgagcgcgaaaacctttacggtccccgagttgcggggcgctccttggagtgcccgaggga  1080

Query: 4035  aagatggttcgttggaacgacgttaacagatttgctctcaaacctgcactgatgagatc  4094
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 1081  aagatggttcgttggaacgacgttaacagatttgctctcaaacctgcactgatgagatc  1140
```

Blast Result

```
Query: 4095  aaccatttatcgcgtctgacattgacggcaaagccgaccaagattggccgtagcgtggca  4154
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 1141  aaccatttatcgcgtctgacattgacggcaaagccgaccaagattggccgtagcgtggca  1200

Query: 4155  agtgtgactataggctgggaagtgaaagacgacccaacgtcgccaggcgcgcgagctggcg  4214
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 1201  agtgtgactataggctgggaagtgaaagacgacccaacgtcgccaggcgcgcgagctggcg  1260

Query: 4215  ggttccaaggtcggtcgagatgctcgtcgcagagggcagcggaaacgatagcccctcc  4274
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 1261  ggttccaaggtcggtcgagatgctcgtcgcagagggcagcggaaacgatagcccctcc  1320

Query: 4275  ttcccagaagcgggcgggatcacctacagtccacgttggctggagctgaaacgctctgct  4334
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 1321  ttcccagaagcgggcgggatcacctacagtccacgttggctggagctgaaacgctctgct  1380

Query: 4335  ggcagcaacaaggacaacgatctgatcgcctcagacttccggcgtttctgtcgggagaga  4394
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 1381  ggcagcaacaaggacaacgatctgatcgcctcagacttccggcgtttctgtcgggagaga  1440

Query: 4395  ggcgtgcgtctggacgctgcaaacatcgaaaactgtttttagatttctgcgcaaggta  4454
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 1441  ggcgtgcgtctggacgctgcaaacatcgaaaactgtttttagatttctgcgcaaggta  1500

Query: 4455  gggaaggtttgagttttgaggtatttcaccgcaatagtgttaaatgactttcgtgaaacg  4514
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 1501  gggaaggtttgagttttgaggtatttcaccgcaatagtgttaaatgactttcgtgaaacg  1560

Query: 4515  atgtgcaatatagcggtaagactatgaaatacacggctggacaggctgcaaagcaacgg  4574
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 1561  atgtgcaatatagcggtaagactatgaaatacacggctggacaggctgcaaagcaacgg  1620

Query: 4575  gtgtggcgaccgcaaccatcactcgggcgctaaaaagcggtaaaatttccggtaaaaaag  4634
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 1621  gtgtggcgaccgcaaccatcactcgggcgctaaaaagcggtaaaatttccggtaaaaaag  1680
```

Blast Result

```
Query:  4635  atgaatctggggcatgggtttatagatcctgcagaattgcacagagtgtttcctcccattt  4694
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  1681  atgaatctggggcatgggtttatagatcctgcagaattgcacagagtgtttcctcccattt  1740

Query:  4695  caaagaaatacaccgaaacacctaacacgcaagtatatggtaagcgtgatgaaacacatg  4754
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  1741  caaagaaatacaccgaaacacctaacacgcaagtatatggtaagcgtgatgaaacacatg  1800

Query:  4755  aaatgacctcagaaatcagcgcattagagcgtgaagttcggacttacgcgatgctttat  4814
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  1801  aaatgacctcagaaatcagcgcattagagcgtgaagttcggacttacgcgatgctttat  1860

Query:  4815  ctgatgccaggggaggatcgcgacaaatggcgcgacatggccgagcgtctttcaatttcat  4874
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  1861  ctgatgccaggggaggatcgcgacaaatggcgcgacatggccgagcgtctttcaatttcat  1920

Query:  4875  caccgatgagagaggaagaccgccccctcaaaaacaaagatggtggaagatattctgat  4934
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  1921  caccgatgagagaggaagaccgccccctcaaaaacaaagatggtggaagatattctgat  1980

Query:  4935  cctgggcttcaggagccttgcctttaaaacctgaatcagcattctagcgatgctgataag  4994
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  1981  cctgggcttcaggagccttgcctttaaaacctgaatcagcattctagcgatgctgataag  2040

Query:  4995  aagtaaatatagccacaatagagcggccatttccattcacatacagctcatcatgtgat  5054
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  2041  aagtaaatatagccacaatagagcggccatttccattcacatacagctcatcatgtgat  2100

Query:  5055  caatatcaagtattgatattcatcaatggagaagaatttacatgtatcacaggatcatca  5114
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct:  2101  caatatcaagtattgatattcatcaatggagaagaatttacatgtatcacaggatcatca  2160

Query:  5115  cagcatttgttttgtatttctaagtgctaacataactatcgctggccctaaagaagatt  5174
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
```

Blast Result

```
Sbjct: 2161  cagcattgtttgtatttctaagtgctaacataactatcgctggccctaaagaagatt  2220

Query: 5175  gtactattgcagtatctcaccttgggttcagaccgataattacagctttgtcgaagccg  5234
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 2221  gtactattgcagtatctcaccttgggttcagaccgataattacagctttgtcgaagccg  2280

Query: 5235  gnnnnnnngccagagagagacacgtttttgatggtgtaataaactgctacgtatctcatg  5294
              |||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 2281  gttttttgccagagagagacacgtttttgatggtgtaataaactgctacgtatctcatg  2340

Query: 5295  atggtaacatacacagcatcatccgggggcaacacacctcttatggagatggatattatg  5354
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 2341  atggtaacatacacagcatcatccgggggcaacacacctcttatggagatggatattatg  2400

Query: 5355  gcccagaagtactggcggaaaaacgcgatattgaggcacaggcccgcactttagaggcgg  5414
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 2401  gcccagaagtactggcggaaaaacgcgatattgaggcacaggcccgcactttagaggcgg  2460

Query: 5415  aagcctataacgagtaccaaaacactagaagccagattgaggaaaataggggaacgtg  5471
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 2461  aagcctataacgagtaccaaaacactagaagccagattgaggaaaataggggaacgtg  2517
```

CPU time: 0.07 user secs.   0.01 sys. secs   0.08 total secs.

```
Lambda      K        H
  1.33    0.621    1.12

Gapped
Lambda      K        H
  1.33    0.621    1.12
```

Matrix: blastn matrix:1 -2
Gap Penalties: Existence: 5, Extension: 2
Number of Sequences: 1
Number of Hits to DB: 908
Number of extensions: 21
Number of successful extensions: 14
Number of sequences better than 10.0: 1

Blast Result

Number of HSP's better than 10.0 without gapping: 1
Number of HSP's gapped: 2
Number of HSP's successfully gapped: 1
Number of extra gapped extensions for HSPs above 10.0: 0
Length of query: 8509
Length of database: 12,527,565,053
Length adjustment: 28
Effective length of query: 8481
Effective length of database: 12,527,565,025
Effective search space: 106246278977025
Effective search space used: 106246278977025
Neighboring words threshold: 0
Window for multiple hits: 0
X1: 11 (21.1 bits)
X2: 26 (50.0 bits)
X3: 26 (50.0 bits)
S1: 12 (23.8 bits)
S2: 23 (44.9 bits)